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## Referral Practices Among U.S. Publicly Funded Health Centers That Offer Family Planning Services

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### Abstract

**Background:** Referrals to other medical services are central to healthcare, including family planning service providers; however, little information exists on the nature of referral practices among health centers that offer family planning.

**Materials and Methods:** We used a nationally representative survey of administrators from 1,615 publicly funded health centers that offered family planning in 2013–14 to describe the use of six referral practices. We focused on associations between various health center characteristics and frequent use of three active referral practices.

**Results:** In the prior 3 months, a majority of health centers (73%) frequently asked clients about referrals at clients' next visit. Under half (43%) reported frequently following up with referral sources to find out if their clients had been seen. A third (32%) of all health centers reported frequently using three active referral practices. In adjusted analysis, Planned Parenthood clinics (adjusted odds ratio 0.55) and hospital-based clinics (AOR 0.39) had lower odds of using the three active referral practices compared with health departments, and Title X funding status was not associated with the outcome. The outcome was positively associated with serving rural areas (AOR 1.39), having a larger client volume (AOR 3.16), being a part of an insurance network (AOR 1.42), and using electronic health records (AOR 1.62).

**Conclusions:** Publicly funded family planning providers were heavily engaged in referrals. Specific referral practices varied widely and by type of care. More assessment of these and other aspects of referral systems and practices is needed to better characterize the quality of care.

### Keywords

referrals; referral practices; family planning; contraception

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Author Disclosure Statement

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## Introduction

Most healthcare providers make referrals in the course of patient care since they rarely can address every healthcare need diagnosed in, or presented by, their patients. Such referrals have been increasingly viewed as a part of care coordination whereby providers are expected to take more responsibility for ensuring that patients experience transitions from provider to provider in a more efficient and effective way.<sup>1,2</sup> However, referrals are complex, affected by a range of patient, provider, organizational, and system factors.<sup>3–5</sup> Patients need adequate information and motivation to seek or participate in a referral. Patients' access to referrals can be affected by their financial status and health-care coverage, as well as distance, transportation, and time available to seek medical care, among many other considerations. Providers may need to support both patients and the providers they refer to, relaying information about their patients and reasons for referral. This process may involve exchange of electronic communication or health records at the organizational level and may be governed by procedures and regulations established by larger healthcare networks or partnerships. This complexity, and the various opportunities for breakdown in the referral process, can help explain why referrals often fail in the United States.<sup>4</sup>

Although most clinical guidelines recommend providing referrals for services that are beyond the scope of a clinic's or provider's practice, there is relatively little guidance as well as mixed research findings about how to effectively make referrals.<sup>6</sup> That said, research on referrals tends to show that in general, passive strategies, which typically place most of the responsibility for a referral on patients (e.g., by providing them with a name and phone number to call to make an appointment), are largely ineffective at ensuring that patients are seen by the referral site in a timely way.<sup>7,3</sup> Conversely, active strategies, such as case management approaches, appear to be more effective at linking persons to care.<sup>8</sup>

For publicly funded family planning service providers, referrals are essential to providing quality care. These providers tend to serve a disproportionate percentage of low-income men and women, many of whom report health concerns that may be appropriately managed by referral.<sup>9</sup> National data from 2006 to 2010 show that family planning providers served as the primary source of healthcare to 6 of 10 women seeking care, and for 4 of 10, that center was their only reported source of healthcare.<sup>10</sup> For these and other reasons, the 2014 federal *Recommendations for Providing Quality Family Planning Services* highlight referral systems and capacity as core parts of quality care.<sup>11</sup>

A handful of studies have characterized aspects of referral practices in family planning service contexts. Based on a survey of over 400 family planning providers in Alabama and Arkansas in 2006, Felix et al. ranked providers in terms of the degree to which they facilitated referrals for their patients diagnosed with HIV<sup>12</sup> and abnormal Pap smears.<sup>13</sup> Facilitated referral was defined as nine specific actions that providers reported always doing for referrals for nonfamily planning-related conditions, such as providing a written referral, making a referral appointment, and following up with providers and with patients. Facilitated referral was generally high across responding providers and, in both analyses, was positively associated with working in a rural area. Facilitated referral for abnormal Pap tests was lower among private practice settings (vs. health department or nonprofit clinic),

but type of practice was not associated with facilitated referral for HIV care.<sup>12</sup> Robbins et al. examined referrals for smoking cessation and newly diagnosed high blood pressure and diabetes in a North Carolina family planning clinic setting. They found that referrals were high, but completion of referrals for chronic disease risk factors was low (*e.g.*, 87% of smokers received cessation counseling, but only 5% of those followed up on quitline referrals).<sup>14</sup>

Collectively, these studies demonstrate some of the patient, provider, and organizational factors involved in referral processes. In this study, we describe referral practices among a national sample of publicly funded health centers that offered family planning services in 2013–14. The objective is to advance discussion, assessment, and evaluation of this essential aspect of healthcare service provision.

## Materials and Methods

From June 2013 to May 2014, surveys were sent to a stratified random sample of 4,000 health centers identified from a Guttmacher Institute database of all publicly funded family planning health centers nationwide.<sup>15</sup> Primary aims of the survey were to provide baseline data for implementation of the *Recommendations for Providing Quality Family Planning Services*<sup>8</sup> and to compare health centers that received funding from the Title X federal family planning program with health centers that did not receive Title X funding. Therefore, by design, the sample was stratified into recipients and nonrecipients of Title X funding. Sampled health centers that were not funded by Title X received other federal, state, or local funding (*e.g.*, Health Resources and Services Administration [HRSA]). Within each of those strata, 2,000 centers were randomly sampled, with further stratification by health center type (health department, Planned Parenthood, community health center, hospital-based center, or other) to ensure proportional representation of health center type within the sample.

Surveys were mailed to sampled health centers accompanied by a postage-paid return envelope, and administrators were asked to complete the survey. Respondents were also given the option to complete the survey online. Reminder postcards, follow-up mailings, and phone calls were made to nonrespondents. Response rates were calculated based on recommendations from the Council of American Survey Research Organizations (CASRO), assuming that the proportion of eligible respondents in the unknown subgroup is equivalent to the proportion of eligible respondents in the subgroup with known eligibility or ineligibility.\* The final CASRO response rate was 49%, with 1,615 completed surveys (61% for Title X-funded centers vs. 38% for non-Title X-funded centers). Some of the health centers sampled were part of the same organizational structure or network, and 14% of surveys were completed by the parent agency on behalf of a sampled child agency. As the project was determined to be nonresearch, public health practice, CDC's Institutional Review Board approval was not needed.

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\*For more information from CASRO on the calculation of response rates, see [http://c.ymcdn.com/sites/www.casro.org/resource/resmgr/docs/casro\\_on\\_definitions\\_of\\_resp.pdf](http://c.ymcdn.com/sites/www.casro.org/resource/resmgr/docs/casro_on_definitions_of_resp.pdf) Accessed September 6, 2016.

## Measures of referral practices

In the survey, administrators were asked about the frequency that their health center used each of the following referral practices in the prior 3 months: (1) provided a resource listing or directory to the client, (2) provided a documented referral to the client, (3) asked the client about the referral at his or her next visit, (4) made an appointment for the client, (5) contacted the client directly about the referral outcome, and (6) contacted the referral source to find out if the client was seen. These practices were not asked specific to any particular type of client or referral condition. The questions were developed for this survey, reviewed by various experts, and piloted with eight health center administrators. However, none of those measures reflect standard or validated questions about referral practices as none were identified at the time of survey development. Response options included never, rarely, occasionally, or frequently. In this analysis, we coded practices as passive (responses 1–3) or active (responses 4–6). We also created a measure representing whether the health center reported frequently doing all three active referral practices (yes/no).

## Independent variables and analytic strategy

We describe referral practices and explore differences in these practices by a select number of health center characteristics available in the survey. We used information included in the original sampling frame from the Guttmacher Institute about the type of health center sampled, whether a community health center (including federally qualified health centers [FQHCs]), Planned Parenthood clinic, health department clinic, hospital-based clinic, or other type. This information was not self-reported by the responding health centers, nor was information on each health center's Title X funding status (yes/no). We also examined referral practices by the following self-reported characteristics: geographic service area (mainly urban/suburban, mainly rural, or mixed), approximate number of clients seen in the last year (six categorical response options ranging from <500 to 50,000+), use of electronic health records (yes/no), and whether the health center reported being part of an insurance network (yes/no). For this analysis, network participation was defined as being part of a Medicaid managed care network, other managed care network/preferred provider organization, or a participating provider in one or more private insurance company networks.

We present univariate frequencies and bivariate associations using chi-square tests to assess the statistical significance of differences in frequency distributions. We used logistic regression to estimate the unadjusted and adjusted odds of the following outcome: frequent use of the three active referral practices in the prior 3 months. We evaluated alternative models such as the negative binomial distribution, but present the logistic results because they yielded similar results and are easier to interpret. We included all health center characteristics outlined above in the multivariable model rather than using a specified cutoff or algorithm for inclusion in the final model. However, we did assess the correlates for multicollinearity and related issues and identified none that led us to exclude any variables from the multivariable model. All analyses used weights that adjusted estimates to represent publicly funded family planning health centers in the United States and were conducted in Stata v. 12.1.

## Results

Of 1,615 completed surveys, 37% were completed by administrators from community health centers, 31% from health departments, 9% from Planned Parenthood clinics, and 7% from hospital-based clinics (Table 1). Sixteen percent were from other types of health centers, 33% of which self-identified as reproductive health/family planning focused (not shown). About half (49%) received Title X federal funding. The Title X network comprised largely of health department clinics (57%), while the non-Title X network comprised primarily of community health centers (59%) (not shown). About half (48%) reported serving mainly rural areas. Total patient volume in the last year varied, with a third (35%) having seen 1,000–4,999 patients. Approximately three-fourths of health centers used some kind of electronic health record (76%) and reported being in one or more health insurance networks (72%).

### Referral practices

We found that a majority (76%–96%) of health centers reported having used each of the specific referral practices occasionally or frequently in the prior 3 months (Table 2). Only 5% reported that they rarely or never asked the client about the referral at the next visit or gave a documented referral to the client (6%). The referral practice that was most often reported as being used frequently was asking the client about the referral at the next visit (73%). This compares with 43 percent that reported frequently following up with the referral source directly to find out if the client had been seen, which was rarely or never done by nearly a quarter (24%). Twenty-two percent of health centers reported using all six practices frequently, and 13 percent reporting using none of them frequently.

Similar proportions of Title X-funded centers and non-Title X centers frequently followed up with the client at the next visit (72% and 74%, difference not significant), while a larger proportion of Title X providers (62%) reported frequently giving a resource listing/directory to the client than non-Title X-funded health centers (49%) ( $p < 0.001$ ). Referral practices also varied by health center type. For example, frequent follow-up with the referral source to find out if the client had been seen was reported by about a quarter of hospital-based clinics (27%) and Planned Parenthood clinics (28%), 35% of health departments, and 57% of community health centers (chi-square  $p < 0.001$ ).

In general, more health centers reported frequently using passive referral practices than active practices. Eighty-four percent of health centers reported frequently doing any of the passive referral practices and 41% reported frequently doing all of them, compared with 71% that reported frequently doing any active practice (not shown). A third (32%) reported frequently doing all three active referral practices (Fig. 1). Bivariate analysis shows that Title X-funded health centers had a lower prevalence of using all three active referral practices than those without Title X funding (27% vs. 37%). Compared with health departments, community health centers had higher odds of doing all three active referral practices (1.97 odds ratio [OR], 95% confidence interval [CI] 1.57–2.49, Table 3). The largest prevalence difference was observed by patient volume, with 19 percent of smaller volume health centers reporting they used all three active referral practices frequently compared with 46 percent of large-volume health centers. Being a part of an insurance network and using electronic

health records were each associated with significantly increased odds of using all active referral practices as well.

Many of these associations remained in adjusted analysis, but some changed. When controlling for other health center characteristics, receiving Title X funding and being a community health center were no longer significantly associated with the outcome. Additionally, in adjusted analyses, Planned Parenthood clinics and hospital-based clinics each had significantly lower odds of frequently using three active referral practices compared with health departments (adjusted odds ratio [AOR] 0.55 and 0.39, respectively). Health centers with mostly rural (AOR 1.39, 95% CI 1.05–1.83) or a mix of rural/urban (AOR 1.74, 95% CI 1.26–2.39) service delivery areas had higher odds of frequently using three active referral practices compared with those serving mostly urban areas.

## Discussion

These results suggest that publicly funded health centers providing family planning services in the United States are heavily engaged in referrals. Most health centers in the survey reported that they occasionally or frequently used the six referral practices assessed, including both passive and active strategies. A third frequently used all three of the active practices in the prior 3 months.

In adjusted analysis, Title X funding status was not independently associated with using those active referral practices. Nevertheless, as a funding mechanism and voice for quality family planning care, the Title X program may be well positioned to support its network agencies to further assess and, where needed, strengthen referral practices. Being a Planned Parenthood clinic and a hospital-based clinic were each associated with lower odds of using the active referral practices compared with health departments. The reasons for these differences are unclear and could relate to organizational or patient factors. Perhaps, as tertiary health-care institutions, hospital-based clinics refer more in-house or less often compared with other institutions and, in turn, do not need to rely on active referral as much. As specialty reproductive healthcare organizations, Planned Parenthood clinics may refer less often than other types of health centers that serve a broader population base and address a wider range of health conditions; thus, Planned Parenthood clinics may report using those active strategies less often. It is also possible that Planned Parenthood clinics have fewer and less active relationships with referring providers. Notably, in other studies, Planned Parenthood clinics have shown a higher quality of care for family planning services compared with other provider types.<sup>16,17</sup>

Analysis of the use of all three active referral practices also found positive independent associations with the following health center characteristics: higher patient volume, having electronic health records, and being a part of a health insurance network. These characteristics may each reflect stronger infrastructures and related administrative assets and policies that facilitated these practices. Strategies that take advantage of modern technology, for example, to elicit electronic prompts or facilitate the transfer of information between provider organizations, have been identified as promising for improving referrals.<sup>3,4,18</sup> There also is some evidence in support of having written referral guidelines with structured referral



forms and for involving specialty care providers in setting up referral protocols.<sup>7</sup> Larger organizations may be more likely to have those resources and systems. However, size of the organization has not always been associated with more positive referral outcomes.<sup>6</sup> Some health insurance networks, particularly managed care organizations, may closely control and facilitate referrals as part of their organizational and business models. This report's findings may, in part, reflect those approaches. Such systems also have been associated with better referral outcomes, although not consistently.<sup>6</sup>

Our analysis also found that frequent use of active referral practices was also associated with serving rural areas compared with serving largely urban areas. It may be that staff at health centers with rural service delivery areas did more to support patient referrals, given that their patients may face more hurdles in obtaining referrals, or that such providers may have tighter referral networks by virtue of operating in areas with fewer providers and referral options.

Another important aspect of referrals not represented in this study is the organizational arrangements that may facilitate or hinder the referral process, such as the integration of services, colocation of services, and referral arrangements between organizations. Based on a sample similar to this study's, a recent report found that in 2015, 63% of publicly funded family planning clinics provided primary care onsite, up from 52% in 2010.<sup>16</sup> Forty-one percent provided prenatal care onsite, and 20% had mammography onsite. Onsite provision of such services circumvents many (although certainly not all) referral barriers and may be associated with greater access and use by clients.

However, the integration of services is unrealistic for many health centers, so referrals between organizations are necessary. That same study also found that most publicly funded family planning centers had numerous informal and formal referral arrangements with related institutions, such as primary care clinics, school-based health centers, social service agencies, and private providers. Nearly all clinics regularly referred patients to some of those providers and these referrals tended to be based on informal referral agreements rather than formal agreements. For example, 26% of all clinics had an informal relationship with a school-based health center compared with 8% with a formal referral agreement. They also found differences in these agreements by certain health center characteristics. For example, 33% of FQHCs had formal referral agreements with social service agencies compared with 6% of Planned Parenthood clinics, while 79% of Planned Parenthood clinics had informal referral agreements with private OB/GYNs compared with 31% of FQHCs. How the formality of referral agreements affects referral outcomes is unknown and should be explored in future evaluation and research.

Clearly, to understand referral practices and systems, many other health center practices and characteristics need to be assessed, besides the six referral practices described here. A detailed examination of referral practices was outside of the intended purpose of the survey from which these data were drawn. Another important limitation of this study is the fact that the survey questions were nonspecific to particular clients or their referral needs, which might typically drive the kind of follow-up (e.g., a provider may follow-up more actively with a client with a new HIV diagnosis than a mild case of hypertension). While

dichotomizing referral practices and arrangements into active versus passive categories facilitated analysis and presentation, it also oversimplified these concepts. Referral practices and arrangements usually encompass many other steps and components such as the existence and content of relevant protocols and participation in other kinds of collaborative partnerships (*e.g.*, community coalitions and clinical training centers) that may facilitate referrals between organizations. Qualitative research with providers and clients as well as surveys dedicated to characterizing referrals would provide a more comprehensive understanding of referrals. These data were largely self-reported by administrators on behalf of the entire health center and prone to various kinds of biases, although the extent of that bias is unknown. Finally, it is important to bear in mind that while on par with surveys of medical facilities, the survey response rate was around 50% and that the sample represents only public-funded health centers that offered family planning, not all providers of family planning services.

## Conclusions

Notwithstanding its limitations, this is one of few studies describing any aspect of referral practices, moreover, using a national sample from a healthcare sector that is invested in making effective referrals—publicly funded family planning centers. This topic is ripe for additional research and evaluation, for example, of how providers decide to use particular referral methods for different conditions and patients and how implementation of electronic medical records helps and hinders effective referrals. Most important, arguably, is more evaluation of the effects of referral practices on patient outcomes and which practices are most cost-effective to employ. Improving our understanding of referrals is critical given the central role that they play in patient care.

## Acknowledgment

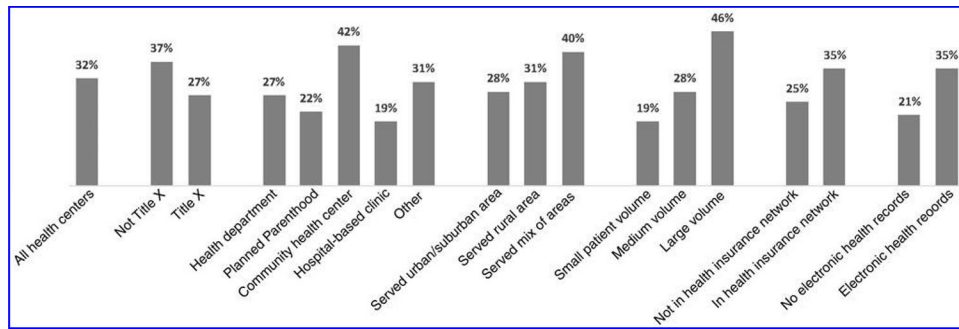
The findings and conclusions of this report are those of the authors and not the official position of the Centers for Disease Control and Prevention or the HHS Office of Population Affairs.

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**FIG. 1.**

Percent of health centers frequently using three active referral practices, by health center characteristics, among health centers offering family planning, 2013–2014.

**Table 1.** Characteristics of Publicly Funded Health Centers That Offered Family Planning Services in the United States, 2013–2014

Funding source ( <i>n</i> = 1,615)	Total patient volume, last year ( <i>n</i> = 1,564)	
Title X	49%	<1,000 15%
Not Title X	51%	1,000–4,999 35%
		5,000–9,999 19%
Health center type ( <i>n</i> = 1,615)		10,000–49,999 27%
Planned Parenthood	9%	50,000+ 4%
Community health center	37%	
Health department	31%	Use of electronic health records ( <i>n</i> = 1,581)
Hospital-based clinic	7%	Yes 76%
Other	16%	No 24%
Type of area served ( <i>n</i> = 1,598)		Part of a health insurance network ( <i>n</i> = 1,615)
Mostly rural	48%	Yes 72%
Mix of rural and urban/suburban	21%	No or did not know 29%
Mostly urban/suburban	31%	

Observation numbers provided are unweighted, but all proportions shown are weighted. For this report, being a part of a health insurance network was defined as being in a Medicaid managed care network, in other managed care network/preferred provider organization, and/or a participating provider in one or more private insurance company networks. All characteristics were self-reported except for funding source and health center type.

**Table 2.**  
Referral Practices Among Health Centers That Offered Family Planning, 2013–2014

	In the last 3 months, when giving referrals, how often did the health center:					
	Passive approaches			Active approaches		
	Give a resource listing or directory to the client	Give a documented referral to the client	Ask the client about referral at next visit	Make an appointment for the client	Contact the client directly about referral outcome	Contact the referral source directly to find out if the client was seen
<i>n</i>	1,575	1,577	1,578	1,583	1,574	1,572
Rarely/never	12%	6%	5%	14%	13%	24%
Occasionally	33%	29%	23%	29%	33%	33%
Frequently	56%	65%	73%	58%	54%	43%
Frequent use of specific referral practices, by select health center characteristics						
	Passive approaches			Active approaches		
	Frequently gave a resource listing or directory to the client	Frequently gave a documented referral to the client	Frequently asked the client about referral at next visit	Frequently made an appointment for the client	Frequently followed up directly with the client about referral outcome	Frequently followed up with the referral source to find out if the client was seen
Funding source						
Title X funded	62%	59%	72%	51%	50%	36%
Not Title X funded	49%	70%	74%	63%	58%	49%
Chi-square <i>p</i> -value	<i>a</i>	<i>a</i>	NS	<i>a</i>	<i>b</i>	<i>a</i>
Health center type						
Planned Parenthood	76%	73%	77%	40%	68%	28%
Community health center	43%	70%	71%	68%	58%	57%
Health department	65%	55%	71%	52%	46%	35%
Hospital-based clinic	50%	61%	75%	55%	44%	27%
Other	57%	68%	77%	57%	56%	41%
Chi-square <i>p</i> -value	<i>a</i>	<i>a</i>	NS	<i>a</i>	<i>a</i>	<i>a</i>

Observation numbers provided are unweighted, but all proportions shown are weighted.

<sup>a</sup>  $p < 0.001$

<sup>b</sup>  $p < 0.01$ .

NS, not significant.

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Unadjusted and Adjusted Odds of Frequently Using Three Active Referral Practices in the Last 3 Months Among Health Centers That Offered Family Planning, 2013–2014

**Table 3.**

Health center characteristics	Unadjusted odds		Adjusted odds ( <i>n</i> = 1,504)	
	Odds ratios	95% confidence interval	Adjusted odds ratios	95% confidence interval
All health centers	—	—	—	—
Ref: Not funded with Title X				
Title X funded	0.64	<b>0.53–0.78</b>	0.89	0.68–1.15
Ref: Health department				
Planned Parenthood	0.76	0.53–1.08	0.55	<b>0.36–0.82</b>
Community health center	1.97	<b>1.57–2.49</b>	1.09	0.79–1.51
Hospital-based clinic	0.62	0.36–1.07	0.39	<b>0.21–0.69</b>
Other	1.25	0.93–1.67	0.89	0.65–1.22
Ref: Served mostly urban/suburban area				
Served mostly rural area	1.16	0.90–1.48	1.39	<b>1.05–1.83</b>
Served mix of rural and urban/suburban areas	1.67	<b>1.25–2.22</b>	1.74	<b>1.26–2.39</b>
Ref: Small total patient volume, last year (<1,000 patients)				
Medium volume (1,000–9,999 patients)	1.61	<b>1.16–2.23</b>	1.59	<b>1.15–2.20</b>
Large volume (10,000+ patients)	3.57	<b>2.53–5.04</b>	3.16	<b>2.18–4.59</b>
Ref: Not part of a health insurance network or did not know				
Part of a health insurance network	1.58	<b>1.26–1.98</b>	1.42	<b>1.10–1.82</b>
Ref: Did not use electronic health records				
Used electronic health records	2.03	<b>1.62–2.53</b>	1.62	<b>1.27–2.07</b>

The three active referral practices included (1) making an appointment for the client, (2) contacting the client directly about the referral outcome, and (3) contacting the referral site about whether the client was seen.

Bolded 95% confidence interval indicates that the interval did not include 1.00.